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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,584	07/15/2003	Shoji Morita	023484-0150	6886

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FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

KIM, YOON YOUNG

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,584

Applicant(s)

MORITA, SHOJI

Examiner

Yoon-Young Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Amendment filed on May 24, 2005.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 8-9, and 13-18 are rejected under 35 U.S.C. 102(a) or (e) as being anticipated by Baumann et al., U.S. Patent No. 6,685,829 B1.

Regarding Claim 8, Baumann discloses an oil filter (Fig. 3, #1) comprising: a housing main body (#2) having an inlet passage and an outlet passage; a cover (#3) detachably attached to the housing main body and having a recessed portion that opens toward a housing main body side; a partition member (#19) disposed in the recessed portion of the cover so as to

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be movable into and out of the recessed portion and partitioning a space between the cover and the housing main body into a filter chamber on a housing main body side and an oil suction chamber on a bottom side of the cover; a seal member (#21) interposed between the partition member and the cover to provide a seal therebetween; a biasing unit (#11) for urging the partition member in a direction to increase the volume of the oil suction chamber; a filter element (#4) disposed in the filter chamber for filtrating oil introduced thereinto; and a communication passage (#6) for providing communication between the oil suction chamber and the oil filter chamber; wherein when the cover is attached to the housing main body, the partition member is pushed down into the recessed portion of the cover against the bias of the biasing unit (Fig. 3a).

Regarding Claims 9 and 18, Baumann discloses a valve that is disposed in the communication passage and opens when the volume of the oil suction chamber increases (#11).

Regarding Claim 13, Baumann discloses that the volume of the oil suction chamber when the partition member is moved maximumly towards an open end side of the recessed portion of the cover is larger than the maximum volume of oil that can remain in the housing main body and the cover upon removal of the cover (Col. 6, Lines 1-10).

Regarding Claim 14, Baumann discloses that the filter element (#4) is detachably attached to the partition member (#19).

Regarding Claim 15, Baumann discloses that the cover is threadedly engaged with the housing main body (Col. 3, Lines 34-36).

Regarding Claim 16, Baumann discloses that the communication passage has an end that is positioned so as to immerse into oil remaining in the cover and the housing main body upon removal of the cover (Fig. 1c).

Regarding Claim 17, Baumann discloses that the communication passage (#6) comprises an annular chamber formed between an opening portion of the housing main body and an outer circumferential surface of the cover, a first connecting passage (Fig. 1c) formed in the housing main body to provide communication between a lower portion of the housing main body and the annular passage, and a second connecting passage (Fig. 3b) formed in the cover for providing communication between the annular passage and the oil suction chamber.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann.

Regarding Claim 10, Baumann discloses an oil draining device (#15) but does not disclose that it is related to the oil suction chamber. It would have been obvious to one of ordinary skill in the art to modify Baumann in order to drain out the oil (Col. 6, Lines 5-10).

Regarding Claim 11, Baumann discloses that the oil draining device comprises a valve (Fig. 1a, #11) mechanism that opens when the oil suction chamber is urged to decrease in volume (Fig. 3a).

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumori et al., U.S. Patent No. 5,902,479 in view of Jones et al., U.S. Patent No. 5,711,872.

Regarding Claim 1, Fukumori discloses an oil filter (Fig. 1, #100) comprising: a housing main body (#40) having an oil inlet passage (#42) and an outlet passage (#43); a cover (#10) detachably attached to the housing main body on a vertically lower side thereof and having a recessed portion that opens toward a housing main body side; a seal member (#11); a biasing unit (#16); and a filter element (#21) disposed in an oil flowing space defined between the housing main body and the cover for filtrating oil introduced thereinto. However, Fukumori does not disclose an inner tubular member. Jones teaches an oil filter (Fig. 2, #10) comprising an inner tubular member (#18) disposed in the recessed portion of the cover (#21). It would have been obvious to one of ordinary skill in the art to modify Fukumori with the element of Jones in order to be able to assemble the filter element without direct contact with the filter element (Col. 8, Lines 30-35).

Regarding Claim 2, Fukumori in view of Jones discloses that the total volume of the cover and the inner tubular member when the inner tubular member protrudes maximumly from the cover is set larger than the maximum volume of oil that can remain in a space between the housing main body and the cover upon the removal of the cover (Fig. 2).

Regarding Claim 3, Jones discloses that the filter element is detachably attached to the inner tubular member (Col. 7, Lines 19-36).

Regarding Claim 4, Fukumori discloses that the cover is threadedly engaged with the housing main body (Fig. 5, #18).

5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumori in view of Jones as applied to Claim 1 above, and further in view of Faria, U.S. Patent No. 5,066,391.

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Regarding Claim 5, Fukumori in view of Jones discloses that the inner tubular member (Jones, #18) comprises a tubular wall and a partition wall closing an end of the tubular wall, the inner tubular member partitioning the oil flowing space into upper and lower oil collecting chambers located above and below the inner tubular member but does not disclose a communication hole. Faria teaches an oil filter (#10) where the inner tubular member comprises a tubular wall (#78) and a partition wall (#74, 112) closing an end of the tubular wall, at least one of the tubular wall and the partition wall of the inner tubular member being provided with a communication hole (#110) for providing communication between the upper and lower oil collecting chambers. It would have been obvious to one of ordinary skill in the art to modify Fukumori in view of Jones with the element of Faria in order to provide a passageway when the oil pressure exceeds a predetermined value (Col. 5, Lines 31-36).

Regarding Claim 6, Fukumori in view of Jones discloses that the volume of the lower oil collecting space when the inner tubular member projects maximumly from the cover is set larger than the maximum volume of oil that can remain in the housing main body and the cover upon removal of the cover (Col. 4, Lines 1-12).

Regarding Claim 7, Faria discloses that the communication hole is formed in the inner tubular member at the position thereof corresponding to the lowermost position (Fig. 2).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann further in view of Faria.

Regarding Claim 12, Baumann does not disclose a check valve. Faria teaches an oil draining device comprising a check valve (Fig. 2, #102). It would have been obvious to one of ordinary skill in the art to modify Baumann with the element of Faria because it is a type of valve common in the filter art.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann in view of Mules, U.S. Patent No. 5,584,987.

Regarding Claim 19, Baumann does not disclose that the annular passage slants downward. Mules teaches that the first connecting passage connected at one of opposite ends to the annular passage extends therefrom so as to slant downwards toward the other of the opposite ends (Fig. 1, #4). It would have been obvious to one of ordinary skill in the art modify Baumann by adding the element of Mules in order to limit distortion of the filter element under fluid pressure acting radially inwards (Col. 1, Lines 56-59).

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukumori in view of Baumann and Janik et al., U.S. Patent No. 5,525,225.

Regarding Claim 20, Fukumori discloses an oil filter (Fig. 1, #100) comprising: a housing main body (#40) having an oil inlet passage (#42) and an outlet passage (#43); a cover (#10) detachably attached to the housing main body on a vertically lower side thereof and having a recessed portion that opens toward a housing main body side; a seal member (#11); a biasing unit (#16); and a filter element (#21) disposed in an oil flowing space defined between the housing main body and the cover for filtrating oil introduced thereinto. However, Fukumori does not disclose an inner tubular member. Jones teaches an oil filter (Fig. 2, #10) comprising an inner tubular member (#18) disposed in the recessed portion of the cover (#21). It would have been obvious to one of ordinary skill in the art to modify Fukumori with the element of Jones in order to be able to assemble the filter element without direct contact with the filter element (Col. 8, Lines 30-35). Furthermore, Fukumori in view of Jones does not disclose an oil collecting portion. Janik teaches an oil collecting portion at an outer circumferential periphery of the cover

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(Fig. 2, #60). It would have been obvious to one of ordinary skill in the art to modify Fukumori in view of Jones by adding the element of Janik in order to lock the cover to the housing (Col. 4, Lines 52-55).

Response to Arguments

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. Fukumori et al., U.S. Patent No. 5,902,479 in view of Jones et al., U.S. Patent No. 5,711,872 and Baumann et al., U.S. Patent No. 6,685,829 B1 teach the oil filter as claimed in the invention.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK
09/01/05


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